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## **ABSTRACT**

A label switched path may traverse multiple network domains of a communication network, namely, a first MPLS domain and a second MPLS domain interconnected by a non-MPLS domain. The label stack information of a packet sent over the LSP is preserved by establishing an tunnel across the non-MPLS domain of the LSP. The tunnel connects the first MPLS domain and the second MPLS domain of the LSP. The packet and label stack information are encapsulated and sent over the tunnel. An MPLS identifier is included in the header of the encapsulated packet so that the packet and label stack information may be identified at the second MPLS domain.